

IN THE SPECIFICATION

Please replace the paragraph beginning at page 9, line 22, through page 10, line 2, with the following rewritten paragraph:

At first, as shown in FIG. 4, image data of the m-th frame 1 is divided into a plurality of first blocks 11 to extract sequentially the first blocks 11 (~~step S1~~) (step S100). A second block of the same size and shape as each of the first blocks 11 is extracted from image data of the (m-k)-th frame 2 (step S101). FIGS. 5A and 5B show the extracted first and second blocks 11 and 12, respectively.

Please replace the paragraph beginning at page 10, line 25, through page 11, line 12, with the following rewritten paragraph:

According to comparison result of step S103, from the second block 12 are extracted the first sub block ~~[[13]] 14~~ including the pixels that the first absolute difference value is less than the first threshold, and the second sub block ~~[[14]] 13~~ including the pixels that the first absolute difference value is more than the first threshold (step S104, S105). That is to say, the second sub block 13 of the second block 12 is a region having a weak correlation with respect to the first block 11, and the first sub block 14 is a region having a strong correlation with respect to the first block 11. The vector connecting the first sub block 14 and the pixel block in the first block 11 that corresponds to the first sub block 14 is assumed as a first motion vector D with respect to the first sub block 14.

Please replace the paragraph at page 12, lines 2-15, with the following rewritten paragraph:

When there ~~[[are]]~~ is an object 31 of a parallelogram shown in an outline on a colored background moving in a cross direction on the background 30 as shown in slanted line in

FIG. 6, for example, and an object 32 of a parallelogram as shown in lateral stripes that moves in a right diagonal direction, a pair of first and second blocks 11 and 12 that indicate the maximum correlation can be obtained when the first and second blocks 11 and 12 together exist on the background 30. In this case, the first region 21 is a varied region (an outline on a colored background part in the (m+n)-th frame 2 in FIG. 6) and the rest (daubed part of the (m+n)-th frame 2 in FIG. 6) becomes the second region 22 as shown in FIG. [[70]]
7.

Please replace the paragraph beginning at page 13, line 20, through page 14, line 5, with the following rewritten paragraph:

It is determined every pixel whether or not the fourth sub block 16 belongs to the first region 21 or the second region 22 (step S111). As shown in, for example, FIGS. 8E and 8F, the region division state of the part (in a region surrounded with a dotted line) including the image data of the same shape is examined. FIG. 8F shows that all the region is pixels already extracted as the sub block 13. The second absolute difference value of the pixels that to belong to the first region 21 is compared with the second threshold, and the fifth sub block whose second absolute difference value is less than the second threshold is extracted from the fourth sub block (steps S112, S114).

Please replace the paragraph beginning at page 14, line 21, through page 15, line 7, with the following rewritten paragraph:

The weighting factor [[use]] used in deriving this weighted mean value can be defined by a reciprocal number of a distance between a to-be-postprocessed pixel and a pixel adjacent thereto. When image data of the to-be-postprocessed pixels in the slanted part as shown in FIG. 9 is derived. The image data a, b and c of top, down and left pixels 41, 42 and 43 are

weighted by being multiplied by a weighting factor 2. The image data of the second pixel 44 from the right (because of the right pixel having no image data) is weighted by being multiplied by a weighting factor 1. The weighted mean value is obtained as $[2(a+b+c)+d] / 7$ by dividing the sum $2(a+b+c)+d$ of four weighted image data by 7 ($=2+2+2+1$).

Please replace the paragraph beginning at page 17, line 18, through page 18, line 2, with the following rewritten paragraph:

In this case, some of pixels extracted as the first sub block are extracted as the sixth sub block. However, if the third threshold is made ~~small~~ smaller than the 1st threshold, the absolute difference value of each pixel included in the second region between the third and fourth sub blocks is smaller than the pixel extracted as the first sub block. In other words, the pixel that the correlation between the third and fourth sub blocks is strong is extracted as the sixth sub block and copied onto the (m+k)-th frame 3, resulting in that it is possible to make an interpolation image of a higher accuracy.

Please replace the paragraph beginning at page 19, line 25, through page 20, line 3, with the following rewritten paragraph:

At first, the (m+k)-th frame 3, for example, 1.5-th frame ($m=1, k=0.5$) is divided into a plurality of to-be-interpolated blocks 51 (~~step S2~~ (step S200)). Subsequently, the first block 11 of the same size and shape as the to-be-interpolated ~~block~~ blocks 51 is extracted from the m-th frame 1, for example, the first frame (step S201).

Please replace the paragraph beginning at page 21, line 20, through page 22, line 1, with the following rewritten paragraph:

As shown in FIG. 13A, the m -th frame 1 and $(m+n)$ -th frame 2 are ~~divides~~ divided into the first region 21 including pixels corresponding to the second sub block 13 (pixels that the first absolute difference value is not less than the first threshold) and the second region 22 including pixels corresponding to the first sub block 14 (pixels that the first absolute difference value is less than the first threshold) (steps S209, S210).

Please replace the paragraph at page 22, lines 8-16, with the following rewritten paragraph:

The third motion vector MV3 from the to-be-interpolated sub block S2 to the third sub block 15 is calculated (step S213). Further, the fourth motion vector MV14 is calculated by multiplying the third motion vector MV13 by $-(n-k)/k$ (~~step S214~~) (step S214). If $n = 1$ and $k = 0.5$, $-(n-k)/k = -1$ and the fourth motion vector MV14 is a motion vector that is the same as the first motion vector MV13 in size and reverse in direction.

Please replace the paragraph beginning at page 23, line 19, through page 24, line 5, with the following rewritten paragraph:

Similarly, as to the pixel belonging to the second region, the second absolute difference value derived in step S216 S219 is compared with the third threshold. The sixth sub block that the absolute difference value is less than the third threshold is extracted from at least the fourth sub block 16 (steps S219, S221). In step S221 of the present embodiment, the regions that the second absolute difference value is less than the third threshold are extracted from the third sub block 15 and the fourth sub block 16 respectively. An average of the

regions assumes a sixth sub block. The sixth sub block that the second absolute difference value is less than the third threshold may be extracted from only the fourth sub block 16.

Please replace the paragraph at page 24, lines 19-22, with the following rewritten paragraph:

When the process from steps ~~S20-S223~~ S200 to S223 is done for all to-be-interpolated blocks 51 derived by dividing the (m+k)-th frame 3, generation of interpolation image for the (m+k)-th frame 3 completes.

Please replace the paragraph at page 29, lines 5-16, with the following rewritten paragraph:

Instead of copying the second sub block 2012, the third sub block 2023 may be copied onto the interpolation frame 2. Alternatively, to the interpolation frame may be copied an image obtained by subjecting to weighted average the second sub block 2012 and the third sub block ~~[[2013]]~~ 2023 according to a time interval with respect to the interpolation frame. The pixel value of the pixel having no pixel information in the interpolation frame 2 is calculated using peripheral pixels (step S1810). For example, it is possible for obtaining the pixel value to use the method explained in step S116 of the first embodiment.

Please replace the paragraph at page 30, lines 4-11, with the following rewritten paragraph:

When an interpolation frame is expressed with a (m+k)-th frame, the simplest example is a case of $n=1$, $k=0.5$. In this case, a search for a block or a sub block that has a strong correlation between the m-th frame and (m+1)-th frame is done for a block pair or a

sub block pair that is in the position of point symmetry with respect to the to-be-interpolated block used as a reference.

Please replace the paragraph at page 31, lines 8-10, with the following rewritten paragraph:

The absolute difference value between the pixels of the first and second blocks 2110 and 2120 is compared with the threshold for every pixel (step S1903).

Please replace the paragraph at page 32, lines 10-14, with the following rewritten paragraph:

The third sub block 2113 of the m-th frame 2101 and the fourth sub block ~~2120~~ 2124 of the (m+n)-th frame 2102 that are in alignment with the to-be-interpolated block ~~2131~~ 2130 and have a strong correlation are extracted from the first regions 2141 and 2151 (step S1908).

Please replace the paragraph at page 33, lines 7-14, with the following rewritten paragraph:

In step S1910, the absolute difference value between the pixels of the third sub block 2113 and the fourth sub block 2124 is computed for every pixel. Only the pixels that the absolute difference value is not more than the threshold may be copied onto the interpolation frame and the other pixels may be interpolated by the pixel values of the peripheral pixels.